

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference PO 44888 HJO/do	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/NL 02/00156	International filing date (day/month/year) 08.03.2002	Priority date (day/month/year) 08.03.2002	
International Patent Classification (IPC) or national classification and IPC G01S11/06			
Applicant TELEFONAKTIEBOLAGET LM ERICSSON ET AL.			

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
 - a. (*sent to the applicant and to the International Bureau*) a total of 18 sheets, as follows:
 - sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - b. (*sent to the International Bureau only*) a total of (indicate type and number of electronic carrier(s)), containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
4. This report contains indications relating to the following items:
 - Box No. I Basis of the opinion
 - Box No. II Priority
 - Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - Box No. IV Lack of unity of invention
 - Box No. V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - Box No. VI Certain documents cited
 - Box No. VII Certain defects in the international application
 - Box No. VIII Certain observations on the international application

Date of submission of the demand 13.08.2003	Date of completion of this report 03.08.2004
Name and mailing address of the international preliminary examining authority: European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Ó Donnabháin, C Telephone No. +49 89 2399-7134



**INTERNATIONAL PRELIMINARY REPORT
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International application No.
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Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 - This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:
 - international search (under Rules 12.3 and 23.1(b))
 - publication of the international application (under Rule 12.4)
 - international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

Description, Pages

1-13 received on 26.05.2004 with letter of 26.05.2004

Claims, Numbers

2-7, 9, 10 received on 26.05.2004 with letter of 26.05.2004

1, 8 filed with telefax on 27.07.2004

Drawings, Sheets

1/5-5/5 as originally filed

- a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

- The amendments have resulted in the cancellation of:
 - the description, pages
 - the claims, Nos.
 - the drawings, sheets/figs
 - the sequence listing (*specify*):
 - any table(s) related to sequence listing (*specify*):
- This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
 - the description, pages
 - the claims, Nos.
 - the drawings, sheets/figs
 - the sequence listing (*specify*):
 - any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

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Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:
 - the entire international application,
 - claims Nos. 1-10
 - because:
 - the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):
 - the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 1,8 are so unclear that no meaningful opinion could be formed (*specify*):
see separate sheet
 - the claims, or said claims Nos. 1-10 are so inadequately supported by the description that no meaningful opinion could be formed.
 - no international search report has been established for the said claims Nos.
 - the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:
 - the written form has not been furnished
 does not comply with the standard
 - the computer readable form has not been furnished
 does not comply with the standard
- the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-*bis* of the Administrative Instructions.
- See separate sheet for further details

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Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1 Lack of Clarity of the Claims (Art. 6 PCT)

The present independent claims (1, 8 and 9) lack clarity (Art. 6 PCT). The feature "allowing the speed indication device to determine information concerning the speed ... relative to a maximum and minimum reception signal strength", present in independent claims 1 and 8, is considered unclear to the extent that it cannot be comprehended. Speed is normally determined relative to, for example, a fixed reference system. Determining speed relative to signal strength appears illogical.

Independent claim 9 lacks clarity as it is not clear from the claim how finding a signal strength minimum is related to determining the velocity. Thus, the claim appears to not contain all the technical features of the invention (Rule 6.3(a) PCT).

2 Lack of Disclosure (Art. 5 PCT)

The application does not comply with the conditions of Art. 5 PCT, as the invention is not disclosed in the description in a manner sufficiently clear and complete for it to be carried out by the man skilled in the art.

On page 6, lines 8-10, it is stated that the invention is based on the observation that "the distance between power minima in a fading radio environment has a fixed typical distance of $\lambda/2$ where λ is the wavelength of the radio signal".

However, as the wavelength of the radio signal is constant (defined by the radio communication system) it is independent of the velocity of the mobile unit. Furthermore, no disclosure can be found in the description linking knowledge of position of the troughs with e.g. the rate at which they occur, to provide a hint to the man skilled in the art as to how a variable velocity could be derived from a constant distance ($\lambda/2$).

Also, the disclosure on page 6, line 31 - page 7, line 3 of the description (this

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feature was included in an amended claim 1) appears to be essential to the invention. However, this disclosure also appears insufficient in so far as it cannot be understood by the man skilled in the art (see §1 above).

Thus, given the above difficulties with deciphering the teaching of the application it is not clear to the man skilled in the art how the velocity can be detected. Thus, the description appears to fundamentally lack disclosure.